



# Factory Service Bulletin

2500 WALDEN AVE. • BUFFALO, NEW YORK 14225 • UNITED STATES  
51 NANTUCKET BLVD. • SCARBOROUGH, ONT. M1P 2N6 • CANADA  
WAALHAVEN • Z.Z. 48 ROTTERDAM • THE NETHERLANDS

SUBJECT: SOURCE  
All Serial Numbers

NUMBER: 827

DATE: 10/82

## SYMPTOMS

- "Plays by itself",
- Resets itself to Preset #1,
- "Freezes" or "Locks Up", making it necessary to turn the power off and on to reset it,
- Looses memory even though the battery soldering is good,
- Occasionally detunes oscillators,
- Various other symptoms which appear intermittent and/or vibration sensitive.

## CAUSE

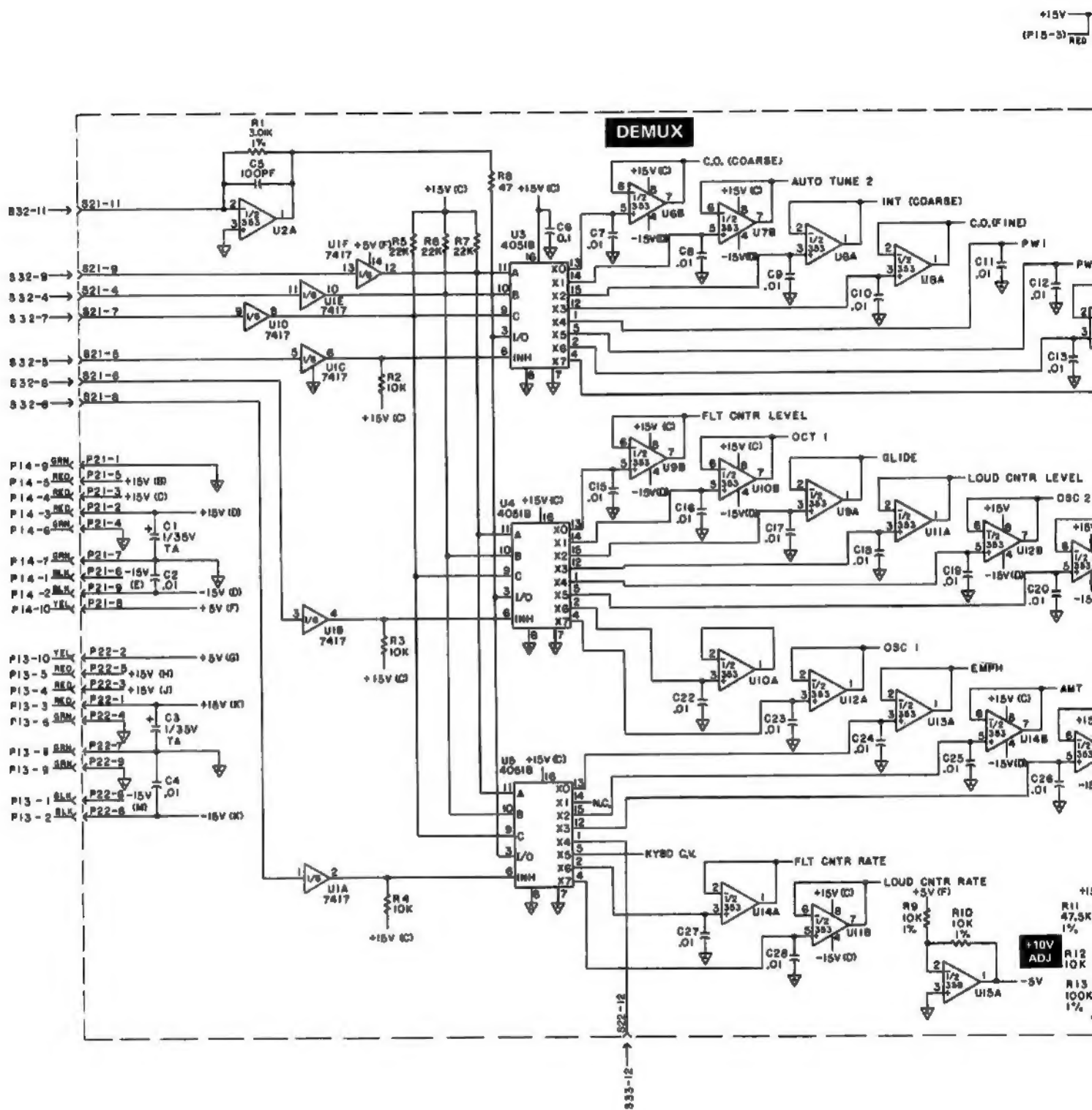
Surface oxidation of the 5 volt digital regulator leads. U3 on the Power Supply Board.

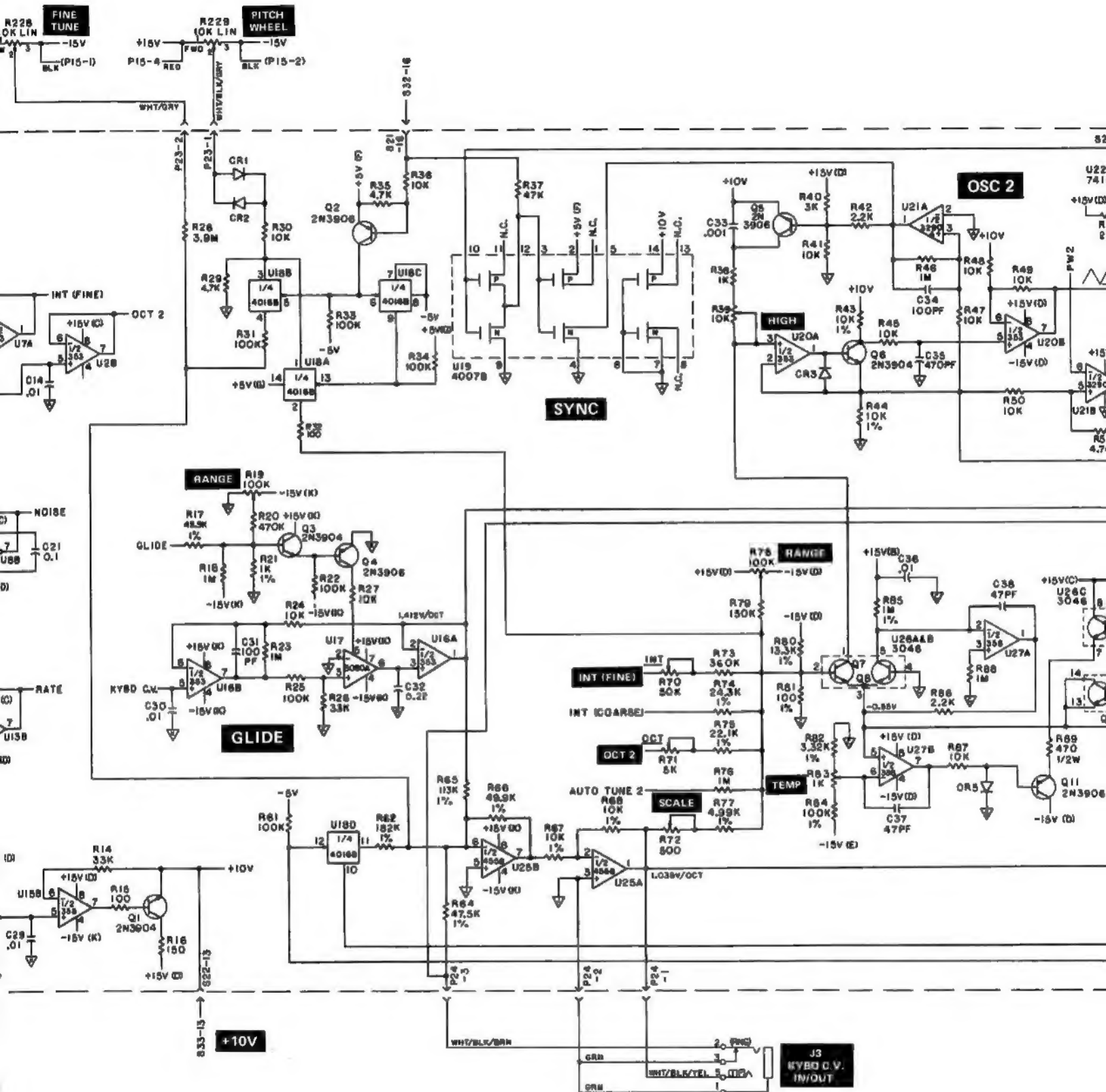
## CURE

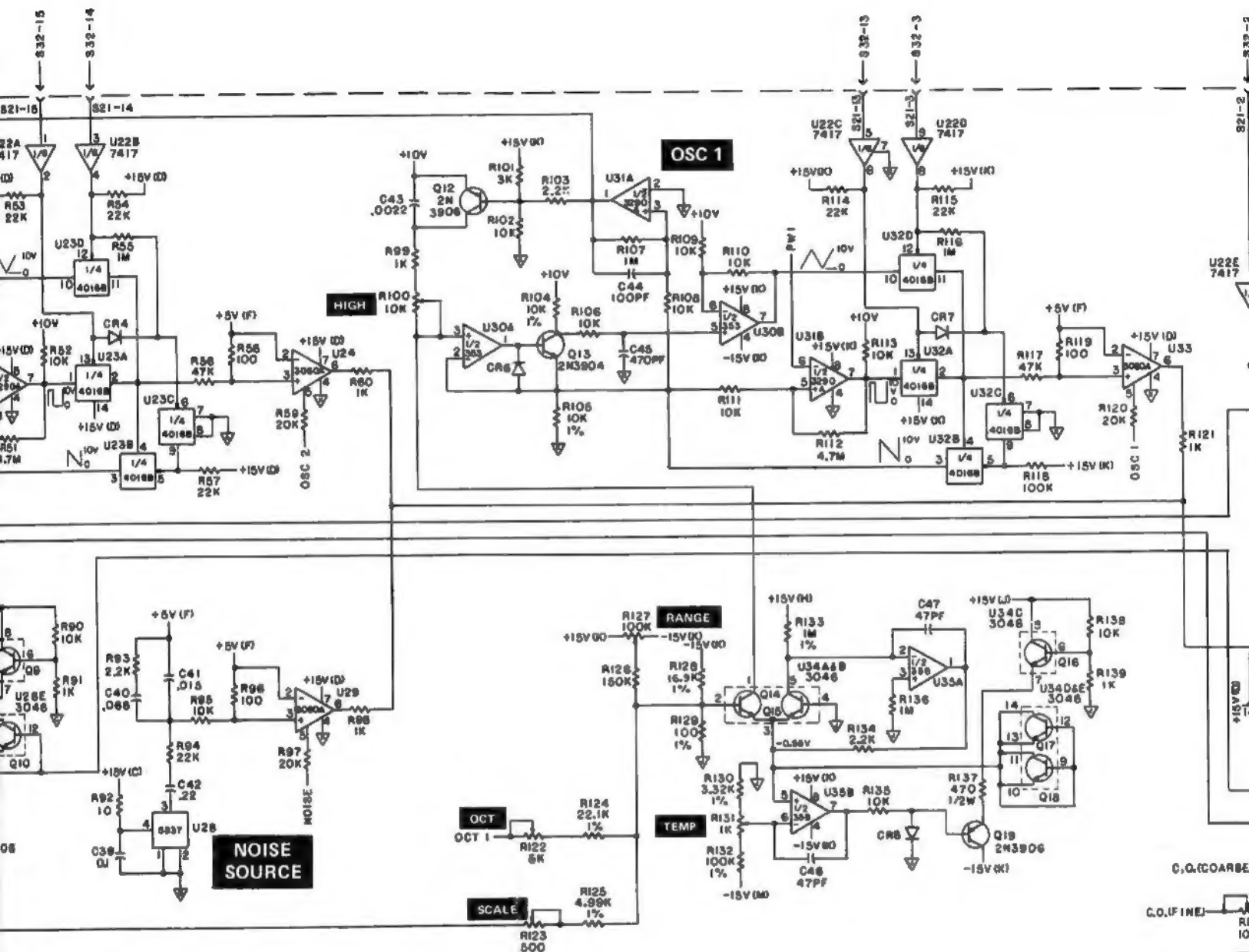
Remove U3 (7805), clean the leads with a pencil eraser and re-install. U3 is located under the row of connectors on the Power Supply and it is recommended that the leads of U3 be cleaned on all units returned for service.

## CONCLUSION



Cleaning the leads of U3 appears to be a permanent cure. Please note the MANUFACTURER AND DATE CODE of the particular regulator when one of the above symptoms surfaces and advise us so for continuing reliability evaluation.

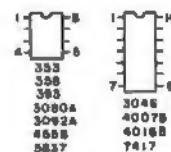


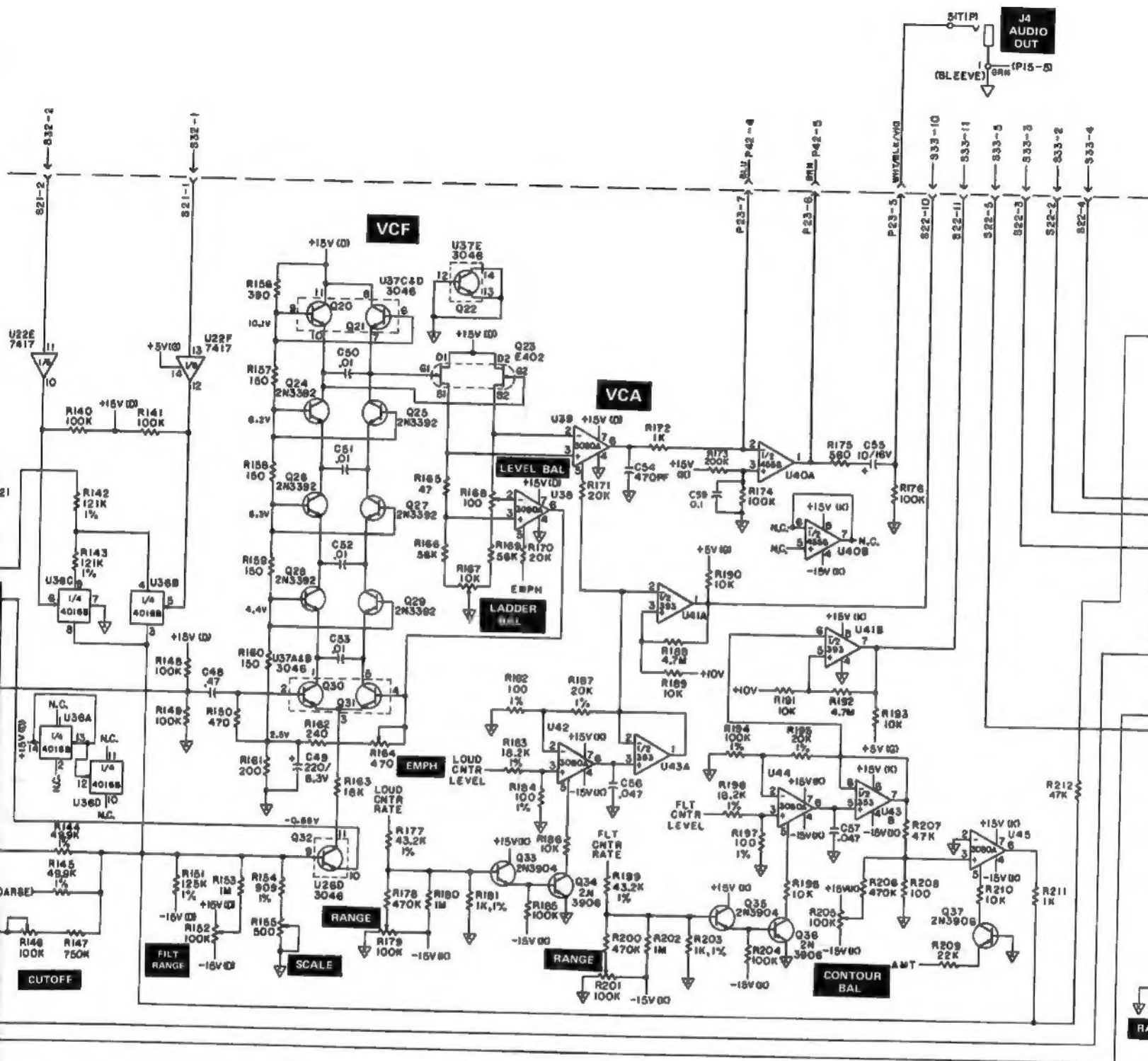




# **NOTES**

1. UNLESS OTHERWISE SPECIFIED-  
ALL RESISTORS ARE IN OHMS 1/4W ±5%  
ALL CAPACITORS ARE IN MFD (μF)  
ALL DIODES ARE IN4148
- ALL  ARE (DIGITAL GND)
- ALL  ARE (ANALOG GND)





COMPONENT BASING  
TOP VIEW





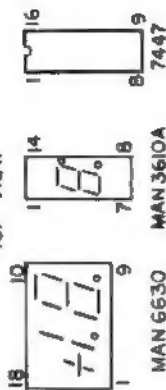
# NOTES:

1. UNLESS OTHERWISE SPECIFIED -  
ALL RESISTORS ARE IN OHMS 1/4 W,  $\pm 5\%$   
ALL CAPACITORS ARE IN MFD. ( $\mu$ F)

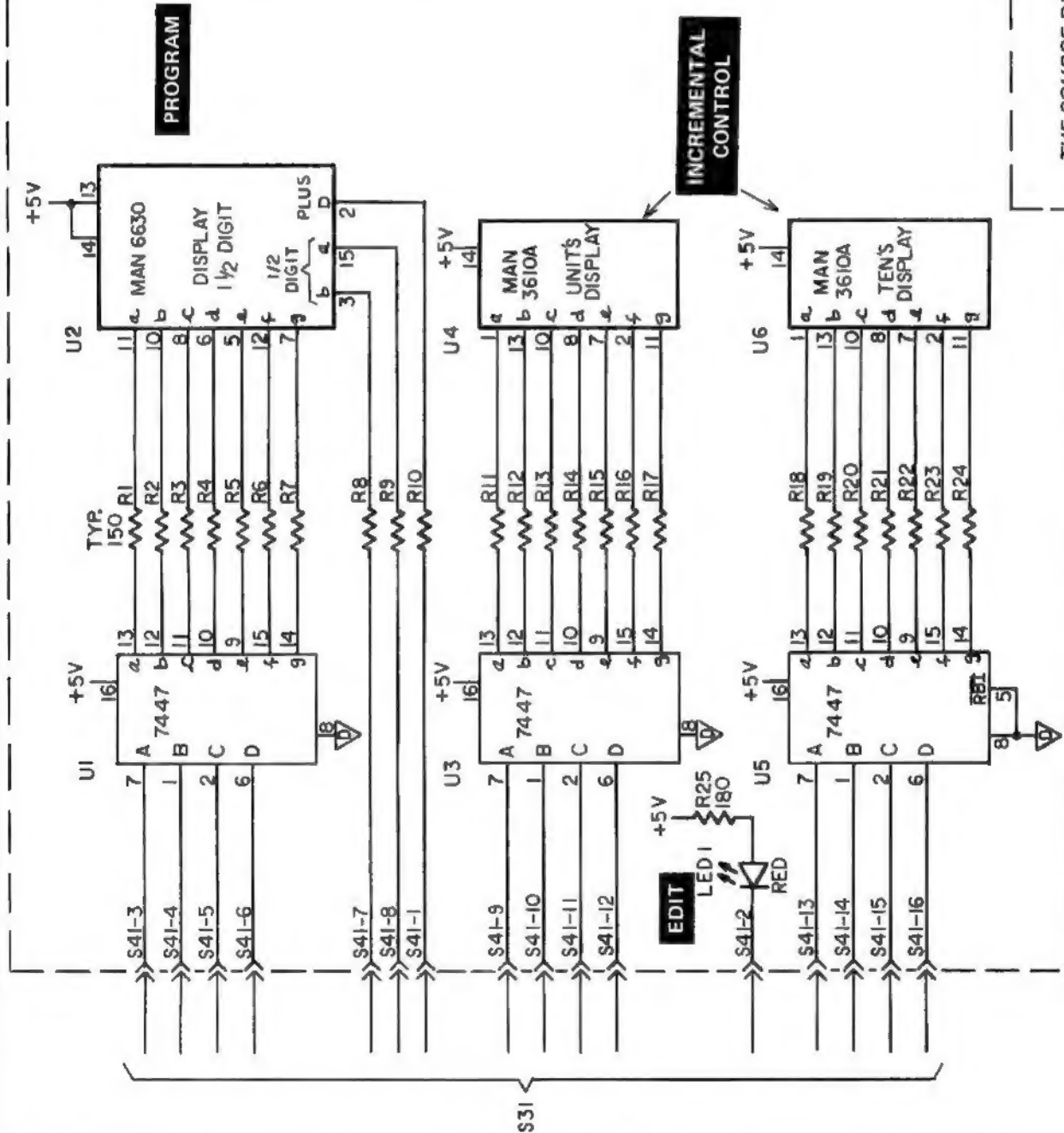
## PROGRAM

## COMPONENT BASING

### TOP VIEW



## BOARD 4 THE SOURCE DISPLAY PRINTED CIRCUIT BOARD SCHEMATIC



PROC  
LAT  
U1  
7413378

DATA BUS  
D0-D8

U23  
2532

A0  
A1  
A2  
A3  
A4  
A5  
A6  
A7  
A8  
A9  
A10  
A11

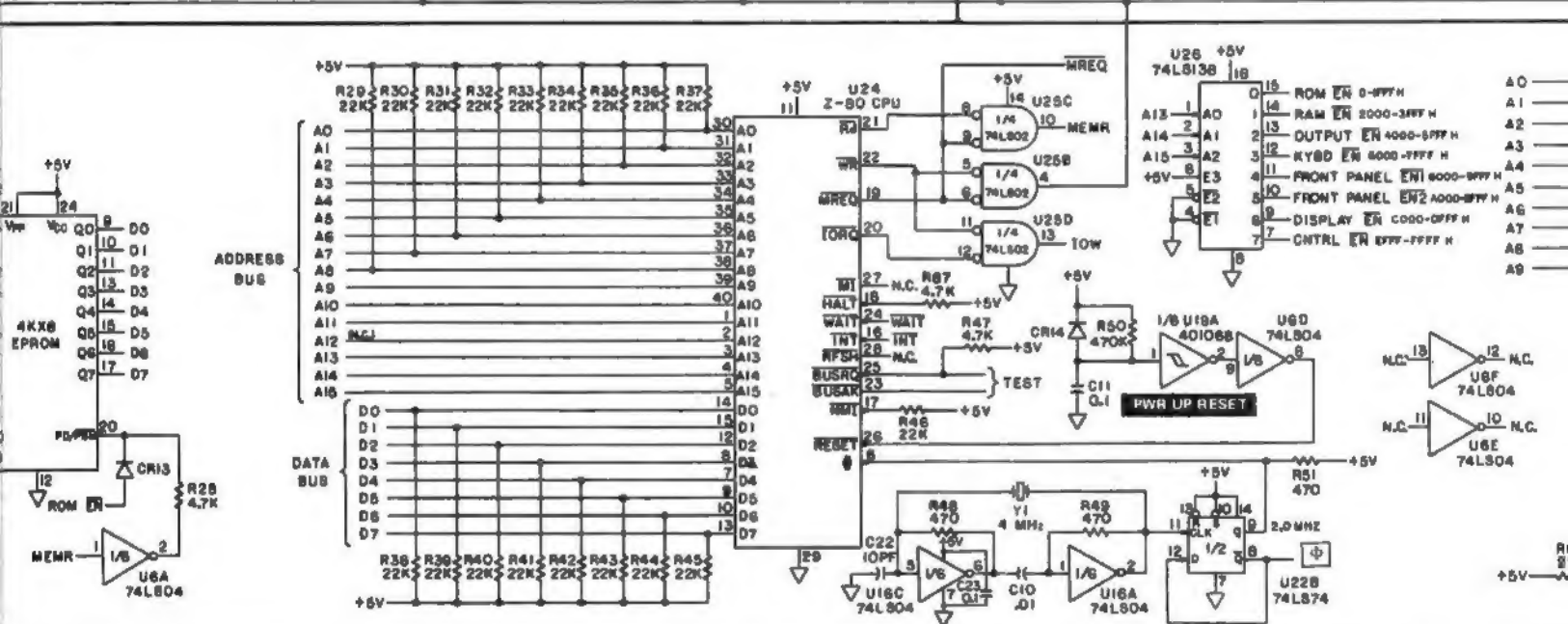
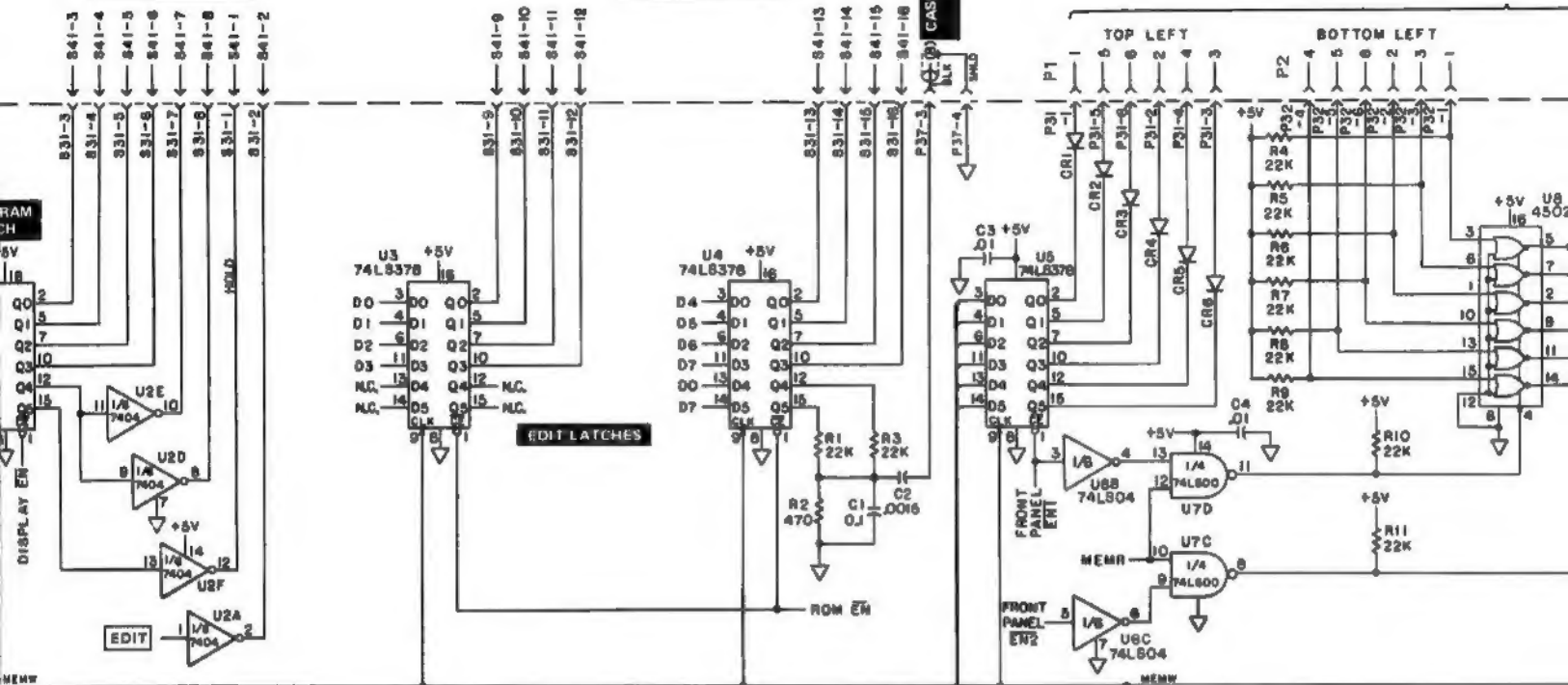
AM6012



# PROGRAM DISPLAY INTERFACE

# EDIT DISPLAY INTERFACE

# MEMBRANE SWITCH

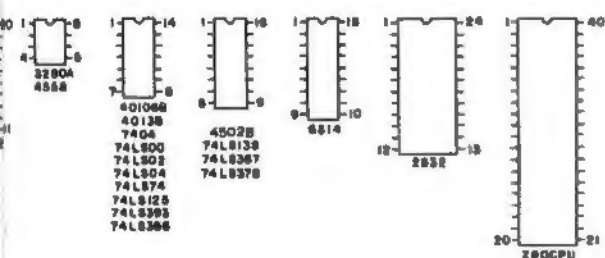


# ROM

# COMPONENT BASING TOP VIEW

# CPU

# CLOCK Φ



# NOTES

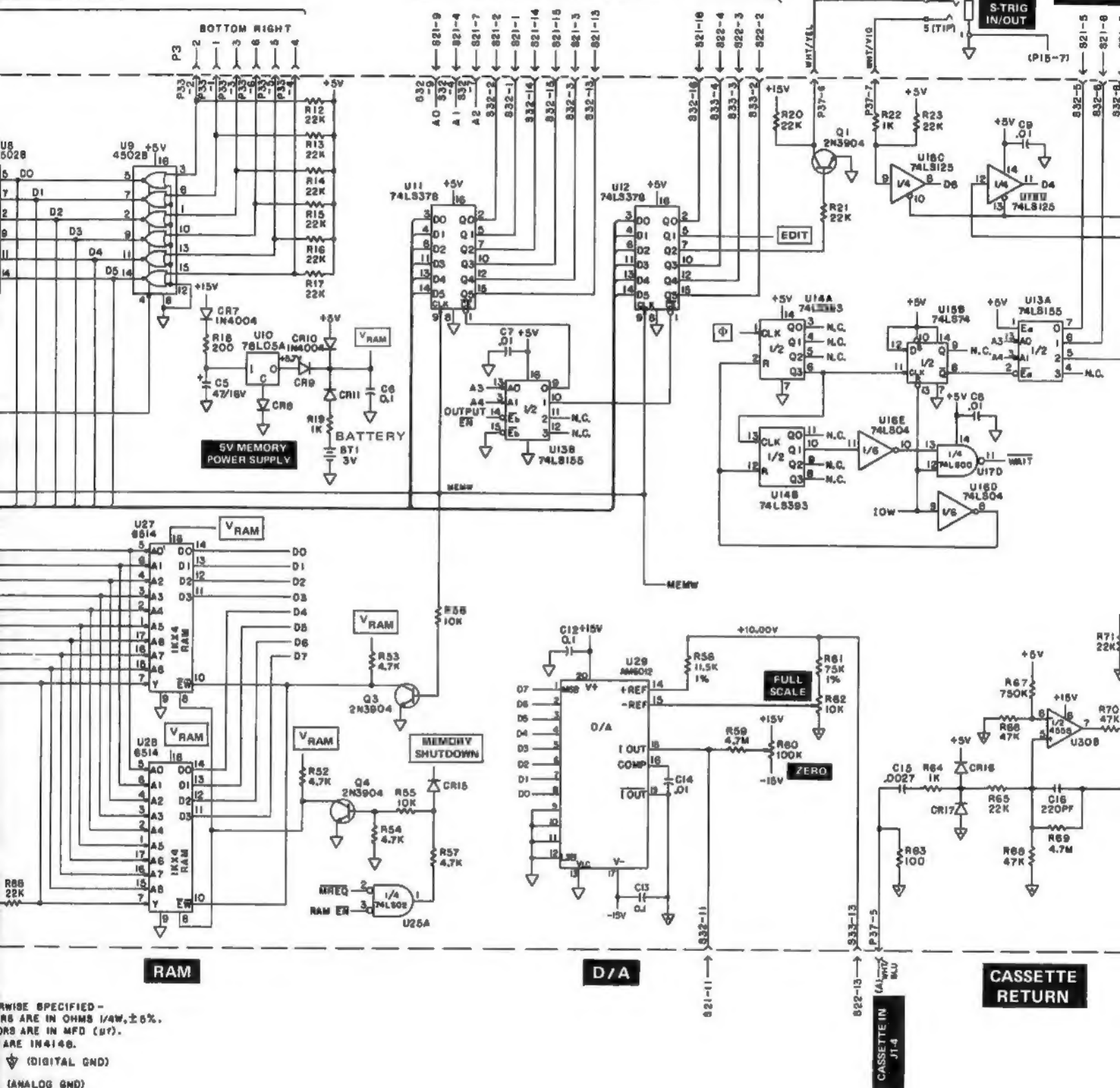
- 1. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1% TOLERANCE.
- 2. ALL CAPACITORS ARE 1% TOLERANCE.
- 3. ALL DIODES ARE 1N4148.
- 4. ALL  $\nabla$  ARE 1N4148.
- 5. ALL  $\nabla$  ARE 1N4148.
- 6. A COMMA IN A PART NUMBER INDICATES A GENERATION.



# H INTERFACE

# SYNTH BOARD OUTPUTS

# DEMU ENABL



UNLESS SPECIFIED -  
RESISTORS ARE IN OHMS 1/4W, ±5%.  
CAPACITORS ARE IN MFD (µF).  
ICs ARE IN 4148.

⏏ (DIGITAL GND)  
⏏ (ANALOG GND)

DO NOT DIRECTLY  
DRIVE BY CPU.



